

WHAT IS CLAIMED IS:-

1. An easy-to-use manual grinder for peppercorns, salt crystals and other grindable products of the type comprising a container with a shaft passing therethrough and bearing conical round type grinder plates at its base, said shaft having at its upper end a toothed wheel operatively connected to a rack which is able to slide in an essentially perpendicular direction to the axis of the shaft.
2. Manual grinder as claimed in Claim 1, wherein said rack is biased to a release position by a return spring.
- 15 3. Manual grinder as claimed in Claim 2, wherein said return spring is located in a longitudinal cavity of said rack.
4. Manual grinder as claimed in Claim 2 wherein said return spring is arranged to apply a torque to said toothed wheel.

5. Manual grinder as claimed in Claim 2, wherein a bearing element is provided at one end of said rack, said bearing element in the release position of the rack jutting out beyond the side of said container.

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6. Manual grinder as claimed in Claim 3 wherein a catch is provided above the toothed wheel, the catch having lower teeth which mesh with upper teeth coupled to said toothed wheel.

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7. Manual grinder as claimed in Claim 6, wherein said catch is pushed against said toothed wheel by a spring.

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8. Manual grinder as claimed in Claims 4, wherein said toothed wheel, spring and said rack are contained inside an upper casing which is connected to an upper end of said container.

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9. Manual grinder as claimed in Claim 8, wherein said upper casing has an opening at its top via which the grindable products can be introduced into said container.

10. Manual grinder as claimed in claim 9 wherein the opening in the upper casing is connected to a chute which extends through an opening in a partition which separates the toothed wheel and rack from the part of the container in which grindable product is located.
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11. Manual grinder as claimed in Claim 10, further including a lid moveable to close and open the opening in the upper casing.
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12. Manual grinder as claimed in Claim 11, wherein said lid can be rotated around a fastener provided on an axis parallel to the axis of said shaft.
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13. Manual grinder as claimed in claim 11 wherein said lid can be rotated around a fastener which fastens said lid to the upper casing.
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14. Manual grinder as claimed in Claim 2, wherein hinged by a hinge on the exterior of said container is an operating lever for said rack.

15. Manual grinder as claimed in claim 14 wherein the hinge
is located at the lower end of said container.

16. Manual grinder as claimed in Claim 5 wherein said
5 bearing element of said rack is engaged with an upper
end of an operating lever hinged by a hinge to the
exterior of said container.

10 17. Manual grinder as claimed in Claim 16, wherein said
bearing element fits into a longitudinal cavity
provided on an upper inner part of said operating lever
during operation of said lever.

15 18. Manual grinder as claimed in Claim 14 or 16, wherein
said container and said operating lever are of such a
size that they can be held by the user in one hand.

19. Manual grinder as claimed in Claim 6, wherein said
20 lower teeth of said catch and said upper teeth of said
toothed wheel have straight teeth on one side and
inclined teeth on the other.

20. Manual grinder as claimed in Claim 11 wherein said container is substantially tubular in shape, and said shaft passes longitudinally through said container.

5 21. Manual grinder as claimed in Claims 20, wherein said grinder plates are located in a base which is open at the bottom and connected to the bottom of said container.

10 22. Manual grinder as claimed in Claim 8, wherein said upper casing is substantially tubular.

23. Manual grinder as claimed in Claim 10 wherein said container is of a transparent material.

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24. Manual grinder as claimed in claim 10 further including a latch mechanism operable to selectively retain the handle in a non-operative position.

20 25. Manual grinder as claimed in claim 24 wherein the latch mechanism includes a button slidably engaged with the handle, the button having a latch element which is engageable with an abutment on the container.

26. Manual grinder as claimed in any one of claim 10 wherein one of the grinder plates is coupled to the shaft by a ratchet mechanism.